

firm invest in capacity in the first place. Competition tends to force prices toward those costs that are realistically achievable, given the realities and limitations of building and operating production facilities.

Additionally, the Hatfield model does not reasonably estimate TSLRIC given real world build-out requirements. The Hatfield model of TSLRIC divides the local exchange service area into six different cost zones based on differing population densities. However, in a highly unrealistic further simplification, the model assumes that customers are evenly distributed in each of the zones. This even distribution is clearly not realistic, and this misguided assumption serves to grossly underestimate real world costs of building local exchange networks. Additionally, the Hatfield model assumes all network build-outs occur in a greenfield environment, to serve new housing developments or office parks. Yet, in reality, a large share of telephone plant is not installed in greenfield situations. Many network build-outs occur as infills in previously built-out areas, for example, when old warehouses are converted to office suites or residential lofts, or when formerly single line residential customers begin demanding multiple lines for fax, modem and Internet access. Such retrofitting, which requires streets to be torn up and preexisting buildings to be modified, is far more expensive than the idealized greenfield build-outs assumed by the Hatfield model.

Moreover, the Hatfield model ignores the extraordinary asset-specificity of local distribution facilities by assuming high utilization rates. Telephone switching capacity and transport facilities are relatively fungible. If one end-user does not use a capacity increment, other end-users can use that increment. However, the local loop and its subcomponents, feeder, distribution and drop, are not nearly as fungible, particularly segments which are dedicated to specific users or geographic areas. For example, feeder cables, which are dedicated to specific distribution areas (neighborhoods) are fungible within dedicated distribution areas but are highly asset-specific across distribution areas. Thus, if a neighborhood as a whole has higher than anticipated growth in demand for access lines, new feeder cables would have to be laid — an extremely costly process. Distribution and drop are asset-specific to smaller geographic areas and individual premises respectively. It is costly to redeploy distribution and drop (but less costly than laying new feeder cables).

It is obviously much more costly to retrofit the network to provide additional lines than it would have been if it were possible to perfectly anticipate growth within and across distribution areas. As land use patterns change (from residential to commercial or from manufacturing to service sector), demand for access lines can increase dramatically and unexpectedly, imposing unanticipated costs on the local exchange provider and making it very difficult to optimize their network design and build-out. These real world costs must be included in any total service incremental cost estimates for local exchange carriers. Because the Hatfield model fails to do so, the cost estimates it generates vastly understate the true cost of providing local exchange service under efficient, but reasonably achievable operating conditions.

While the unrealistic and impractical assumptions mentioned above concerning whole builds in greenfield environments and overstated utilization rates are reason enough for rejecting any cost estimates from the Hatfield model, it has a number of other flaws, all of which, not surprisingly, bias downward its estimates of the TSLRIC of local exchange services and network elements. The Hatfield model:

Incorporates modules from the Benchmark Cost Model (BCM) which exclude distribution plant in urban areas and other network components which have variable investment costs in the long run. These omitted costs are caused by the provision of local telephone service and should therefore be included in a TSLRIC analysis.

Excludes product specific costs such as marketing and product management which are caused by a specific service and thus should be included in a TSLRIC study.

Assumes that the design and sizing associated with AT&T's interLATA toll network is relevant for U S WEST's local exchange network. Assumptions about the most efficient technology for connecting tandem switches does not accurately reflect traffic flow volumes or utilization factors on U S WEST's local exchange network, which operates with much lower traffic densities than a long distance network.

Violates the "total service" aspect of TSLRIC by relying on inputs from the New Hampshire Telephone Incremental Cost Study for drops and switch maintenance expenses. That model only estimates costs for an incremental expansion of an existing service.

Given these obvious flaws and deliberate costing biases, it is not surprising that the TSLRIC estimates generated by the Hatfield model are well below the ILECs' embedded costs. If the TSLRICs were truly equal to those estimated by the Hatfield model, the ILECs' existing facilities would not represent

an advantage to the ILECs, but rather a tremendous liability. Since ILECs' embedded costs are so much higher than the TSLRIC proposed by the Hatfield model, new entrants would easily be able to take significant market share away from the ILECs by building new facilities at the Hatfield cost, well below the ILECs' costs, and then selling the services for the lower price that would result. If the Hatfield cost estimates were accurate, AT&T would not hesitate to build its own network. Yet, instead, AT&T demands unbundling because they claim the cost of building their own networks would be *too high*. In this sense, the cost estimates generated by the Hatfield model contradict the basic premise of unbundling: that because it is not economic for new entrants to build distribution plant to provide local exchange services, ILECs should be required to unbundle their facilities and sell them at TSLRIC.

Moreover, the price of residential exchange service is, in many areas of many states, well above the TSLRIC estimates of the Hatfield model, which suggests that entrants have an economic incentive to enter the market by building their own facilities. What one observes, though, is that entrants are building facilities only in urban centers and other concentrations of high volume business users, not in residential areas. The reason for that pattern of entry and investment is straightforward: it costs far more to build local distribution plant in residential areas than the Hatfield model estimates. Indeed, I know for certain that U S WEST would gladly procure its distribution plant from Hatfield Associates at prices equal to the Hatfield TSLRIC cost estimates and delivered on a timely basis to protect against "held orders" or other service quality infractions.

The costs of recent additions to plant by U S WEST is a far better estimate of the costs of constructing local exchange facilities than estimates generated by a model based on highly unrealistic assumptions, despite AT&T's claim that "the economic costs to be measured are the forward-looking costs of providing the network element in question, and the ILECs' backward-looking book costs should rarely, if ever, be used as 'proxies' for those forward-looking costs."<sup>9</sup> Just as the forward-looking incremental cost of auto assembly capacity can be estimated by using last year's investment, including "new plants" and modernized or expanded plants, so too is U S WEST's recent investment

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<sup>9</sup> AT&T's Comments in Response to the NPRM at 55-56, Docket No. 96-98.

cost a reasonably good estimate of the “forward-looking” cost of local exchange service, because it reflects the actual and difficult field conditions in which and under which local exchange facilities are constructed. For example, in the state of Colorado, U S WEST’s average embedded cost of constructing a loop in 1995 was more than \$30 per month. In contrast to the Hatfield model’s average cost estimate of \$8.66 per month, U S WEST’s embedded cost is a much better estimate of the forward-looking cost of efficiently building local loops.<sup>10</sup>

**E. If TSLRIC Pricing And Other AT&T Requests Were Implemented, ILECs Would Be Forced Into Severe Financial Distress or Insolvency**

AT&T, MCI and others advocate that prices should be set at TSLRIC to replicate conditions in competitive markets.<sup>11</sup> However, competition does not drive prices to the cost of the most efficient producer. An industry supply curve is upward sloping because it reflects differences in the cost of production, from the most efficient to least efficient capacity in the industry. The equilibrium competitive price is equal to the cost of the least efficient producer who is actually producing in the competitive market. In a competitive industry, therefore, one can observe that the least efficient producers earn profits below their cost of capital, while the most efficient producers earn profits in excess of their cost of capital. Were that not the case, there would be no incentive to increase efficiency by investing in new technologies or to expand capacity to meet growing demand.

AT&T claims (and the FCC has agreed) that IXC’s operate in a competitive market. AT&T also claims that prices in competitive markets equal TSLRIC. These claims therefore imply that AT&T’s own prices are set at TSLRIC. However, it is evident that AT&T’s interLATA prices can not possibly be set at TSLRIC. A comparison between AT&T’s Tariff 12 rates and their basic residential rates shows a tremendous difference in the two prices — approximately 70 percent. This difference cannot be attributed entirely to billing costs. Nor can it be attributed to common or shared costs, since AT&T

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<sup>10</sup> See AT&T’s Comments in Response to the NPRM, Hatfield Model Version 2.2, Release 1, p. 54.

<sup>11</sup> “Prices for telecommunications services should reflect the costs of those services, as they would in a competitive market. This means prices should be set at total long service [sic.] long run incremental cost (TSLRIC). This standard will allow the ILECs to recover the full, forward-looking costs of providing network elements including a reasonable return to capital.” MCI’s Comments in Response to the NPRM at iii, Docket No. 96-98.

claims that unattributable common and shared costs are negligible in the provision of telecommunications service.<sup>12</sup> The only possible conclusion is that either the price of Tariff 12 services is set far below TSLRIC, or the price of basic residential service is set far above TSLRIC. Since it would make no sense for AT&T to price its services that far below TSLRIC — even to the large business customers who qualify for special contracts, it must be true that AT&T's retail list prices are far above TSLRIC.

Even among residential customers, the IXC's prices vary widely, which indicates that their prices cannot be set at TSLRIC. Consider, for example, residential customers X and Y who have identical calling patterns (duration and time of day of calls). Assume that initially both customers subscribe to AT&T but that customer X switches to MCI and customer Y stays with AT&T, without inquiring about AT&T's calling plan options. AT&T is likely to offer customer X a cash rebate and a cheaper calling plan to switch back to AT&T, without actively marketing the same discounts to customer Y. Therefore, these two customers end up paying very different per minute rates for interLATA telephone calls, depending on their calling plan, while the costs of providing that service remain equivalent. Because AT&T is charging similarly situated customers different rates for service, it must be true that AT&T is not pricing its interLATA calls at TSLRIC. This is but one example of how firms in a competitive environment do not price at TSLRIC, but rather include markups based on market forces that vary markedly across customers. In any industry with multi-product firms, price-cost relationships (i.e., profit margins) differ greatly across the product line. It is disingenuous for the IXCs to advocate a "competitive" pricing standard for ILECs that they do not follow themselves.

The U S auto industry, for example, began to adopt new production and management techniques in the early 1990s and continues to increase productivity in its plants. By 1994 Chrysler had taken the lead in modernizing its plants and updating its production design processes. According to a securities analyst report,

"While Ford Motor may still operate some of its plants more efficiently than Chrysler does, there is no question that in the whole process of designing, engineering, and

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<sup>12</sup> Baumol, Ordover, Willig Attachment to AT&T's Response to the NPRM at 13, Docket No. 96-98.

manufacturing vehicles, Chrysler is the low-cost leader. The first of the Big Three to adopt 'lean production' techniques, Chrysler has had the most experience in taking the costs out of the vehicle right at the start - during the engineering stage."<sup>13</sup>

However, it is important to note, as shown in Table II below, that Chrysler was not the only firm that was making a per unit profit, but that it was making the largest per unit profit. Clearly, then prices are not driven to the cost of the single most efficient producer in an industry or the other producers could not remain viable.

**Table II : Per Unit Profits of Big Three Automakers in North America**

Company Name	Average Profit Per Auto
Chrysler	\$1,939
Ford	\$837
General Motors	(\$790)

*Source: DLJ, Company Report, November 3,  
1994 (3Q94 data)*

Moreover, if U S WEST is forced to price interconnection and unbundled elements at TSLRIC, it will have to recover the shared and common costs of building and operating its network solely from its own retail customers, while allowing competitors full use of the network without contributing their proportional share of these costs. U S WEST could not compete with new entrants under these terms because it would always be forced to charge higher prices to retail customers than its competitors, for the use of the same services and components of the U S WEST network. Such a situation is clearly inequitable and unsustainable; U S WEST would be driven out of business. This need to recover common and shared costs is also why companies in a diverse array of competitive markets, such as the computer chip manufacture, Intel, and the oil producer, Chevron, include such costs in their wholesale prices.

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<sup>13</sup> W.B. Needham, Donaldson, Lufkin & Jenrette Securities, *Chrysler Corporation - Company Report*, November 3, 1994.

The prices of goods and services in most industries are not equal to TSLRIC. Marking prices up from TSLRIC to recover shared, common, and embedded costs is practiced universally in all competitive industries, not just regulated utilities. In most industries, including network industries such as local exchange service, there are substantial economies of scale and scope that significantly improve production efficiency. In such cases — which certainly apply to local telecommunications services — prices must exceed TSLRIC for a firm to recover all of its costs. If prices do not recover total costs in an industry, firms will not invest to replace capacity, much less expand capacity. If firms continue to under-recover their costs, some will exit the industry, further reducing supply relative to demand. As capacity is reduced, prices will rise to the point where they will cover all costs, not just TSLRIC. In the case of U S WEST, the sum of the TSLRICs for all services is considerably less than its total costs of providing telecommunications services in the most efficient manner. Hence, its prices must exceed TSLRIC to cover its costs and to justify further investment in the telecommunications infrastructure in its territory.

Up until today, many ILECs, including U S WEST, have existed under rate-of-return regulation in their state jurisdictions. During the transition to competition, U S WEST is still entitled to recover its investments made under the social contracts on which rate-of-return regimes are based. Rate-of-return revenue requirements were implemented to ensure universal and ubiquitous high quality service, and to provide for the recovery of ILECs' costs without enabling ILECs to obtain monopoly profits. For example, in Colorado, U S WEST's cost studies estimate the TSLRIC of a local loop to be \$19 per month but the average embedded cost is \$30. Based on the 2.3 million access lines in the state this represents an annual difference of more than \$300 million. Unless U S WEST is allowed to recover full cost of the loops it invested in, it will be forced out of business.

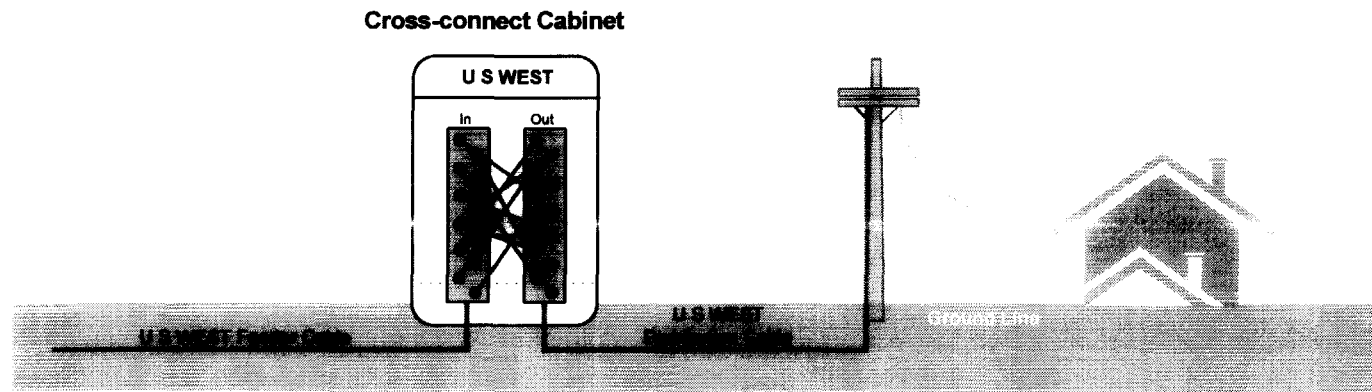
*In addition to advocating TSLRIC pricing (based on an inappropriate definition of TSLRIC) for unbundled elements, AT&T has also advocated the following policies, any combination of which would reduce investment in local exchange infrastructure and prevent ILECs, such as U S WEST, from recovering their operating expenses and earning a reasonable return on investment: preventing ILECs from recovering the costs of unbundling or wholesaling, allowing IXCs to use unbundling to*

bypass access charges (creating an effective discount of 87.5% off current interstate access charges), requiring ILECs to unbundle their networks and wholesale their services without term and volume commitments, mandating an uneconomically large wholesale "avoided cost discount," and applying wholesale discounts to promotional or preexisting wholesale rates enjoyed by high volume end-users. If all of these policies were implemented, ILECs would be forced into insolvency.

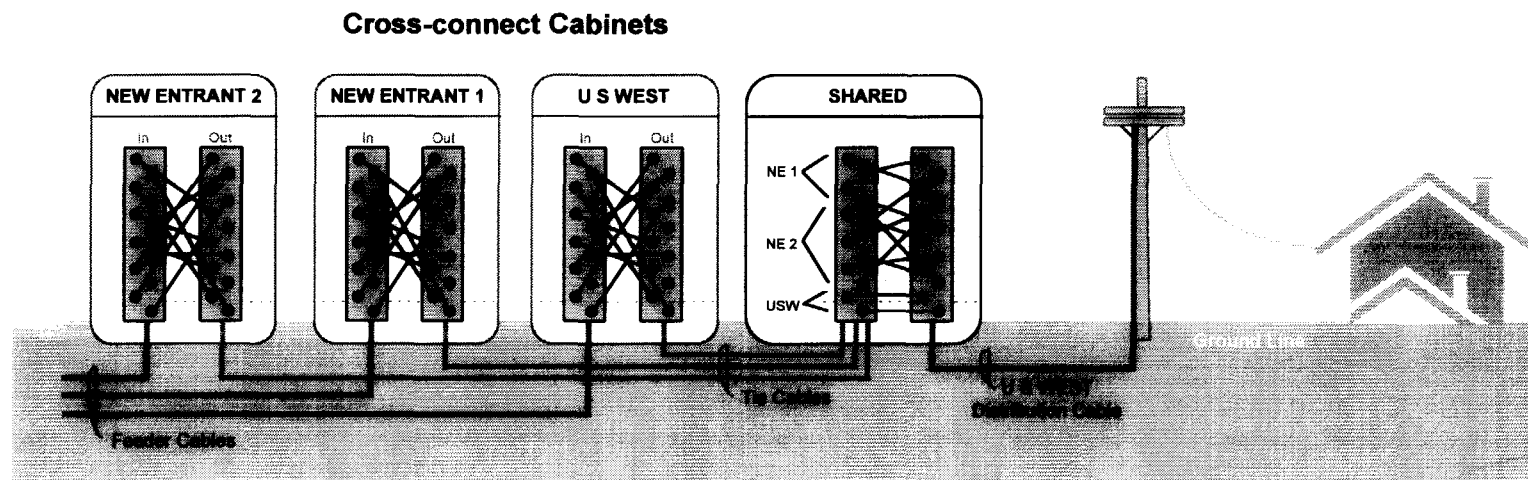


## TODAY'S SUBSCRIBER LOOP

Figure 1

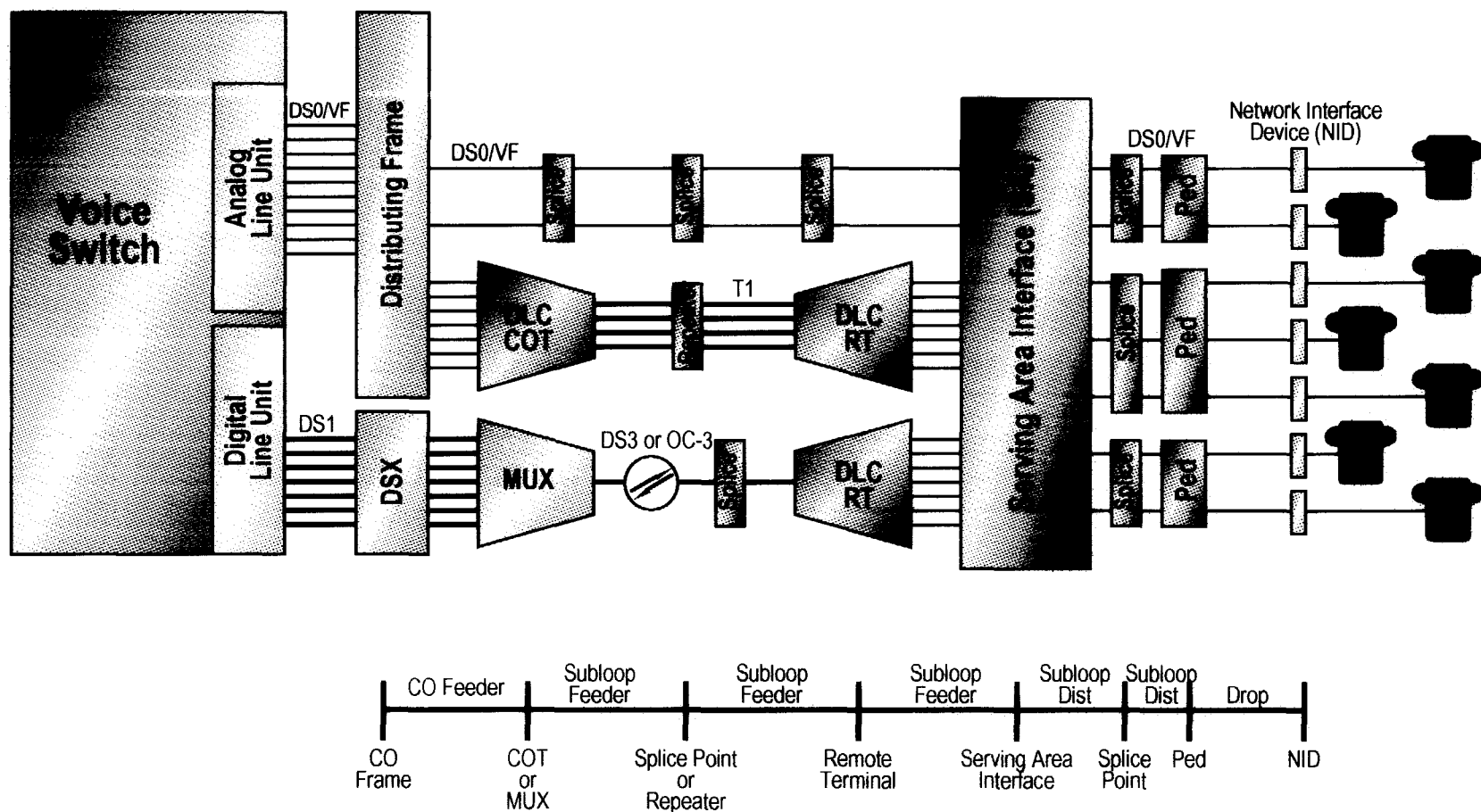


## WITH SUBSCRIBER LOOP UNBUNDLING




# Loop Unbundling As Proposed By AECs

## Figure 2



## CERTIFICATE OF SERVICE

I, Kelseau Powe, Jr., do hereby certify that on this 30th day of May, 1996, I have caused a copy of the foregoing **REPLY COMMENTS OF U S WEST, INC.** to be served via first-class United States Mail, postage prepaid, upon the persons listed on the attached service list.

  
Kelseau Powe, Jr.

**\*Via Hand-Delivery**

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